ABSTRACT

A method to form a programmable resistor device in an integrated circuit device is achieved. The method comprises depositing a semiconductor layer overlying a substrate. The semiconductor layer is patterned to form a plurality of lines. The lines are electrically parallel between a first terminal and a second terminal. Any of the lines may be blown open by a current forced from the first terminal to the second terminal. A metal-semiconductor alloy is selectively formed overlying a first group of the lines but not overlying a second group of the lines. A method to program the programmable resistor device is described.